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(54) NEW AMYLASE

(57)Abstract:

PROBLEM TO BE SOLVED: To obtain a new alkali liquefying type amylase having high residual activity after treating at a specific pH, temperature and time in the presence of EDTA or EGTA and a resistance to a chelating agent and useful for a detergent mixing component, etc., for increasing detergency, etc.

SOLUTION: This new alkali liquefying type amylase has  $\geq 70\%$  residual activity after treating at pH 10, at 45°C for 30 m in the presence of 1-100 mM EDTA or EGTA and has a high resistance to a chelating agent degrading  $\alpha$ -1,4 glucoside bonding of starch, amylose, amylopectin and their partially degraded material without affecting to pullulan and useful as a detergent formulation component, etc. The new amylase is obtained by culturing a microorganism Bacillus sp. KSM-K36 strain (FERM P-16816) belonging to genus Bacillus, adding ammonium sulfate so as the supernatant to have 80% saturated concentration, recovering the resultant precipitate, separating and purifying with an anion exchange column chromatography or a gel filtration column chromatography.

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